

WHAT IS CLAIMED IS:

1. A terminal block for conductively coupling at least one pair of electrical wires, the terminal block comprising:

(a) a non-conductive base,

(b) a first conductive bus bar mounted on the base,

(c) a second conductive bus bar mounted on the base in a spaced apart relationship from the first bus bar, and

(d) a conductive shunt adapted to be disposed into selective common contact with both of the first and second bus bars.

2. The terminal block as claimed in claim 1 further comprising a non-conductive shuttle coupled to the conductive shunt.

3. The terminal block as claimed in claim 2 wherein the shuttle is capable of displacement relative to the shunt between a first position in which the shuttle insulates the shunt from both of the first and second bus bars and a second position in which the shuttle permits the shunt to conductively contact both of the first and second bus bars.

4. The terminal block as claimed in claim 3 wherein the shuttle is adapted to be releasably locked in place in either of its first and second positions.

5. The terminal block as claimed in claim 4 wherein said terminal block further comprises a shunt carrier fixedly mounted onto the shunt.

6. The terminal block as claimed in claim 5 wherein the shuttle is slidably mounted on the shunt carrier.

7. The terminal block as claimed in claim 6 wherein the shunt carrier includes a first recess and a second recess.

8. The terminal block as claimed in claim 7 wherein the shuttle includes a projection, the projection on the shuttle being disposed to ratchet into the first recess in the shunt carrier when the shuttle is disposed in its first position, the projection on the shuttle being disposed to ratchet into the second recess in the shunt carrier when the shuttle is disposed in its second position.

9. The terminal block as claimed in claim 3 further comprising a shunt switch coupled to the shuttle for displacing the shuttle between its first and second positions.

10. The terminal block as claimed in claim 9 wherein the shunt switch includes a handle which is externally accessible.

11. The terminal block as claimed in claim 1 further comprising:

(a) a spring chamber coupled to the base, and

(b) at least one spring coupled at one of its ends to the spring chamber and at the other of its ends to the shunt.

12. The terminal block as claimed in claim 11 wherein the at least one spring resiliently urges the shunt in the direction towards the first and second bus bars.

13. A terminal block for conductively coupling at least one pair of electrical wires, said terminal block comprising:

(a) a non-conductive base,

(b) a conductive bus bar mounted on the base, the bus bar being shaped to define a threaded bore, and

(c) a cover assembly mounted on the base over the conductive bus bar, the cover assembly comprising,

(i) a non-conductive cover comprising a top surface, the cover being shaped to define a bore, and

(ii) a captive screw assembly retained within the bore in the cover.

14. The terminal block of claim 13 wherein the conductive bus bar includes a first end and a second end.

15. The terminal block of claim 14 wherein the cover assembly and the base together define first and second wire receiving receptacles.

16. The terminal block of claim 15 wherein the first end of the bus bar is positioned within the first wire receiving receptacle and the second end of the bus bar is positioned within the second wire receiving receptacle.

17. The terminal block of claim 13 wherein the captive screw assembly comprises,  
(a) a screw disposed within the bore in the cover, and  
(b) a spring disposed within the bore in the cover for resiliently urging the screw away from the bus bar and in the direction towards the top surface of the cover.

18. The terminal block of claim 17 wherein the captive screw assembly further comprises a retaining ring coupled to the cover for retaining the screw and the spring within the bore in the cover.

19. The terminal block of claim 18 wherein the spring includes a first end coupled to the screw and a second end coupled to the retaining ring.

20. The terminal block of claim 17 wherein the threaded bore in the bus bar is sized and shaped to receive the screw.

21. The terminal block of claim 17 wherein the cover includes a lip which protrudes into the bore in the cover.

22. The terminal block of claim 21 wherein the lip is sized and shaped to retain the screw recessed beneath the top surface of the cover.

23. A terminal block for conductively coupling at least one pair of electrical wires, the terminal block comprising:

- (a) a non-conductive base,
- (b) a conductive bus bar mounted on the base,
- (c) an end cap mounted on the base, the end cap being adapted to be mounted on a DIN rail, the end cap having an outer end wall, and
- (d) a DIN rail lock disposed at a location inside of the outer end wall of the end cap, the DIN rail lock being adapted to selectively engage the DIN rail.

24. The terminal block as claimed in claim 23 wherein the DIN rail lock is coupled to at least one of the base and the end cap.

25. The terminal block as claimed in claim 23 wherein the DIN rail lock comprises:

- (a) a pin having a first end and a second end, and
- (b) a bracket mounted on the second end of the pin, the bracket comprising at least one sharpened tooth.

26. The terminal block as claimed in claim 25 wherein the pin of the DIN rail lock is engaged by both the non-conductive base and the end cap.

27. The terminal block as claimed in claim 26 wherein rotation of the pin vertically displaces the position of the bracket relative to the pin.

28. The terminal block as claimed in claim 27 wherein the end cap includes a top surface shaped to include an opening so as to render the first end of the pin of the DIN rail lock externally accessible.

29. A terminal block for conductively coupling at least one pair of electrical wires, the terminal block comprising:

- (a) a non-conductive base shaped to include a mounting block,
- (b) a conductive bus bar mounted on the base, and
- (c) an end cap removably mounted on the mounting block.

30. The terminal block as claimed in claim 29 wherein the end cap is snap-fit mounted onto the mounting block of the base.

31. The terminal block as claimed in claim 30 wherein the mounting block on the base includes an outwardly protruding tooth which engages a rib on the end cap to help retain the end cap mounted on the base.

32. The terminal block as claimed in claim 31 wherein the end cap is adapted to receive a latching lug.

33. The terminal block as claimed in claim 32 wherein the end cap is adapted to receive a marker.